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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,391	02/21/2001	Hiroyasu Fujiwara	826.1680/JDH	5413

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EXAMINER

LY, ANH

ART UNIT	PAPER NUMBER
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2172

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DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,391

Applicant(s)

FUJIWARA, HIROYASU

Examiner

Anh Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request Continued Examination

1. The request filed on 03/19/2004 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/788, 391 is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 7-8 have been added.
3. Claims 1-8 are pending in this application.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,094,651 issued to Agrawal et al. (hereinafter Agrawal).

With respect to claim 1, Agrawal discloses a to-be-totalized information storage unit storing detail data as information to be totalized (the aggregating information as to-

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be-totalization information is stored on levels of hierarchies of a OLAP data cube including a plurality of data cell where the data or information is stored on it: col. 2, lines 20-38);

a hierarchical information storage unit storing hierarchical structures having information used in totalizing the information to be totalized (data in an OLAP is stored as a multi-level of hierarchical information: col. 2, lines 54-67);

a computing unit totalizing the detail data as information stored in the to-be-totalized information storage unit according to the structure having hierarchical information stored in the hierarchical information storage unit (computing the aggregating information, total of sales figures of all stores , or value found at each group of the cube of the multidimensional OLAP database including a plurality of datasets: col. 11, lines 24-65 and col. 2, lines 28-35, also see col. 9, lines 63-67 and col. 10, lines 1-22);

and wherein said totalizing information can be displayed very readily in a form each individual user demands independently of data contents and regardless of a presence or absence of classification information for totalization (as shown in fig. 1 and fig. 2, aggregated data of a data cube for OLAP is displayed. The aggregated data is displayed in a tabular format and based on the change of the sales of a product, the total of sales figure and the regions of the product as classification information for totalization: col. 4, lines 12-25 and col. 5, lines 12-58).

Agrawal discloses a multidimensional data cube, multidimensional OLAP datasets. The user may navigate this OLAP for locating and guiding the user to the

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interesting regions in a data cube. The aggregated data in the same level in the data cube is displayed to the user. Agrawal does not clearly teach each individual user demands independently of data contents and regardless of a presence or absence of classification information for totalization..

However, Agrawal discloses the groups of products as classification information are displayed for view of aggregated data for changes sales (col. 5, lines 12-58).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the displaying the aggregated data of the group of products with sales figures and regions for the product stored in the data cube for classification information for totalization as taught by Agrawal because it would have made the system to be ensure that any level of information or data aggregation to be stored and to be displayed based on the group or level of hierarchy of the data stored in the data cube of multidimensional OLAP datasets (col. 2, lines 20-67).

With respect to claim 2, Agrawal discloses a display control unit controlling display of totalization result for information at an arbitrary hierarchical level in the hierarchical information, and if necessary, information at a hierarchical level lower than the arbitrary level or totalization results for information at the lower hierarchical level (col. 2, lines 18-67 and col. 5, lines 50-58).

With respect to claim 3, Agrawal discloses the display control unit controls display of information at an even lower hierarchical level or totalization results for information at the even lower hierarchical level (col. 5, lines 12-58).

With respect to claim 4, Agrawal discloses wherein the to-be-totalized information are classified into a plurality of groups, the hierarchical information storage unit stores hierarchical information about the plurality of groups, and the computing unit totalizes information stored in the to-be-totalized information storage unit on the basis of hierarchical information about any one of the groups (data sets and group of products of aggregated data: col. 2, lines 18-38 and col. 4, lines 12-28 and col. 5, lines 12-58).

Claim 5 is essentially the same as claim 1 except that it is directed to a computer readable recording medium rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

With respect to claim 6, Agrawal discloses information storage storing information to be totalized (the aggregating information as to-be-totalization information is stored a level of a data cube: col. 2, lines 20-38);

Totalization hierarchical information storage storing hierarchical information defining a totalization hierarchy allowing totalizing of the information to be totalized even when classification information is unavailable for user in totalizing the information to be totalized (data in an OLAP is stored as a multi-level of hierarchical information: col. 2, lines 54-67 and as shown in fig. 1 and fig. 2, aggregated data of a data cube for OLAP is displayed. The aggregated data is displayed in a tabular format and based on the change of the sales of a product, the total of sales figure and the regions of the product as classification information for totalization: col. 4, lines 12-25 and col. 5, lines 12-58);

a computing unit totalizing the information stored in the information storage according to the hierarchical information stored in the hierarchical information storage

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(computing the aggregating information or value found at each group of the cube of the multidimensional OLAP database including a plurality of datasets: col. 11, lines 24-65 and col. 2, lines 28-35);

Agrawal discloses a multidimensional data cube, multidimensional OLAP datasets. The user may navigate this OLAP for locating and guiding the user to the interesting regions in a data cube. The aggregated data in the same level in the data cube is displayed to the user. Agrawal does not clearly teach classification information is unavailable for use in totalizing the information to be totalized.

However, Agrawal discloses the groups of products as classification information are displayed for view of aggregated data for changes sales (col. 5, lines 12-58).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the displaying the aggregated data of the group of products with sales figures and regions for the product stored in the data cube for classification information for totalization as taught by Agrawal because it would have made the system to be ensure that any level of information or data aggregation to be stored and to be displayed based on the group or level of hierarchy of the data stored in the data cube of multidimensional OLAP datasets (col. 2, lines 20-67).

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,094,651 issued to Agrawal et al. (hereinafter Agrawal) in view of US Patent No. 6,434,544 issued to Bakalash et al. (hereinafter Bakalash).

With respect to claim 7, Agrawal teaches storing data to be totaled (the aggregating information or data aggregation as data to be totaled is storing on an effectively navigating large multidimensional OLAP data cube: col. 2, lines 20-37).

allowing a user to select one of the hierarchies (the user of the system enabling to locate the data in the level of the a dimensional hierarchy: col. 2, lines 18-45); and

totaling the data responsive to the hierarchy selected (total of sales or information or amount of aggregated data to be computed: col. 5, lines 12-25, see fig. 1 and fig. 2; also col. 2, lines 1-11).

Agrawal teaches using the technique of a multidimensional OLAP data cube to store the data in each cell, thus user would navigate or locate data easily to the level of a dimensional hierarchy (col. 2, lines 20-52) and creating an OLAP storing data with dimensions or as associated with hierarchies (col. 1, lines 27-45). Agrawal does not explicitly teach two hierarchies linking the data according to at least two users's data requirements.

However, Bakalash teaches an aggregation engine implementing data stored in OLAP having a number of dimensions, a number of hierarchies from multiple user of a three-tier or layer client/server architecture (see fig. 8A, col. 15, lines 48-60 and fig. 1A).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Agrawal with the

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teachings of Bakalash so as to have a multiple hierarchies of data structure to store a large of information over a system with multiple of users for accessing that system. The motivation being to have a system having data to be stored on a multiple levels of hierarchies OLAP data cube enabling user accessible easily and locating data quickly as well as navigation data for display.

With respect to claim 8, Agrawal teaches wherein the hierarchy has levels and the user is allowed to select a level within the hierarchy and the total for that level in the hierarchy is produced (the user of the system enabling to locate the data in the level of the a dimensional hierarchy: col. 2, lines 18-45; and total of sales or information or amount of aggregated data to be computed: col. 5, lines 12-25, see fig. 1 and fig. 2; also col. 2, lines 1-11).

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Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is 703 306-4527 or via E-Mail: ANH.LY@USPTO.GOV. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on 703 305-9790.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington, D.C. 20231

or faxed to: Central Fax Center (703) 7872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-6606 or (703) 305-3900.


JEAN M. CORRIELUS
PRIMARY EXAMINER

ANH LY 
MAY, 20th, 2004